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A Marketing Approach to Job Development and Placement

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The Job Guide system in Massachusetts is primarily designed to assist those professionals and managers involved in operating employment-related education and job training programs in improving the effectiveness of job development and placement activities. In brief, the Guide accomplishes this task by providing two key types of information. First, the Guide contains data that will assist professional staff in determining which specific industries in Massachusetts are likely to hire workers who possess skills or experience in a particular occupational area. Second, the Guide provides information on the names, addresses, and phone numbers of the firms that comprise a particular industry within a given Service Delivery Area in Massachusetts. Over 600 occupations distributed over 350 industries together with 83,000 firm listings are included in the Massachusetts *Job Guide*. *The Job Guide* is designed as part of a more broadly defined "Marketing Approach to Job Development and Placement." This approach, described in detail below, parallels the strategic marketing and sales methods employed by many private sector sales organizations. At the heart of this approach is the need to effectively target specific human resource program placement efforts at narrowly defined market segments. When used in combination with other information sources available from the Massachusetts Department of Employment and Training, this Guide should considerably enhance the marketing and job placement capabilities of local education, employment, and training organizations.

A Marketing Approach to Job Development and Placement

Unlike most marketing and sales organizations, human resource organizations find themselves serving two primary functions. First, these organizations provide a wide array of counseling, training, and support services to program participants in order to assist them in obtaining their employability objectives. Second, and of equal importance, human resource agencies must also provide services to employers to enable them to meet their hiring requirements and maintain an adequately skilled and motivated work force. Although these two tasks should be viewed as complementary, unfortunately, they are sometimes perceived as contradictory functions.

At one extreme, some agencies emphasize a "client-oriented" approach to service provision that highlights the educational and training deficiencies of clients and largely ignores local labor market development and employer hiring requirements. This approach views the mission of providing educational and training activities as an end unto itself and neglects the role of private employers as important clients of the human resource system.

A second and equally one-sided perspective of some human resource programs is that their primary mission is to meet the immediate manpower requirements of local employers. In accord with this view, the human resource organization's primary task is that of solving "labor shortage" or related recruitment problems of local firms. Advocates of this perspective maintain that human resource programs' overriding goal must be that of meeting the specific occupational and skill

requirements of local employers. Therefore, the focus of such programs cannot be on serving the more educationally and economically disadvantaged. These individuals are viewed as too costly to serve and at too great a risk of failure.

Over the years these two sharply divergent philosophical perspectives have each claimed precedence and have become an issue of policy debate, particularly when federal employment and training legislation is up for reauthorization. In our view, while these debates produce passionate heat, they generate little light on the practical problems of job placement confronting a state or local human resource system.

In the final analysis, nearly all employment-oriented human resource programs function as labor market intermediaries. As labor market intermediaries, they find themselves in the unique position whereby they must meet the needs of *both* program participants and local employers to be successful in the short and long run. They do not have the luxury of subscribing to either one or the other of the philosophical extremes described above. Effective participation in any type of market means that an organization must provide the appropriate set of goods and services to meet the demand of local consumers of a product. Thus, as labor market intermediaries, human resource organizations need to organize themselves as effective brokers for their clients and simultaneously meet the needs of local employers. In doing so, they must also meet the needs of individual clients seeking services. In order to effectively play this role of labor market intermediary, human resource organizations must adopt the methods of other organizations involved in sales activities in competitive markets. Therefore, effective job development and placement practices should be based

at least in part on knowledge of effective sales and marketing techniques used in the private sector.

Four Key Features of an Effective Marketing Effort

The development of an effective marketing capability within a local human resource organization should be based upon important lessons from the marketing and sales literature. Among the most important features of an effective marketing capability are the following four:

1. *Effective sales and marketing efforts are almost always associated with solid, practical knowledge of the characteristics and the quality of the goods or services that are currently being marketed by the organization.* "Know thy product" is a first commandment for effective sales. In the private sector that means that the sales staff must be familiar with the distinguishing features of their product relative to alternative sources of supply. Familiarity with the *qualities* of the product, including knowledge of its various capabilities, is essential. Effective marketing and sales personnel possess information about the wide array of uses that the products possess and how their products will help potential consumers meet their needs, solve problems, or benefit them in some other way. Finally, effective marketing requires knowledge about the likely performance of the product, including the reliability of the product over time.

Most private sector firms providing goods and services produce a limited mix of products that, once designed, are standardized in the production process. Thus in order to familiarize marketing staff with information about the features, uses, and performance

of, say, a line of personal computers, it is only necessary to "product train" staff for a short period of time.

The circumstances confronting a job developer in a human resource agency are very different from those in a private sector firm. The hallmark of the "products" produced by the human resource agency is that they are intangible and variable in quality. Professional marketing staff will not be selling standardized duplicating machines or computers. What they will be selling is a promise. By this, we mean that such organizations are promising an employer that by interviewing clients they will be buying a future employee, one who possesses the capabilities necessary to be a productive worker for that employer. Yet in order for a job developer to sell the promise of a potential employee, he or she must take into account the extraordinary diversity in the characteristics, abilities, values, desires, and performance of the clients that are being served. Unlike same-brand computers, no two clients are the same. Thus program clients, unlike physical products, each have their own unique characteristics and qualities. They have their own set of occupational aspirations, abilities, aptitudes, and personal constraints. These must be taken into account in the job development process. If job developers and placement personnel fail to do this, they will not be able to fulfill the promise being offered to employers, since they will not be able to match their clients to an employer's needs.

For example, suppose a young man has successfully completed a welding program operated by a human resource agency but, because of the presence of young children in the household, can only work on the second shift, as his wife now works on a first shift. If job developers do not take this personal constraint into

account when they try to place this person, then they will increase the likelihood of failure. If this client is referred to first shift positions, such an action will obviously fail to generate a training-related placement. Job developers will also lose credibility with local employers since they failed to do a good job in screening out inappropriate referrals, a major complaint of employers about public labor market intermediaries. Finally, they will lose credibility with the client when they are unable to place him.

Thus, at the heart of a local job development and placement system, there must be an effective assessment and career counseling process. Such a system should be designed to systematically identify the interests, aptitudes, and abilities of clients as well as their personal and family barriers to current employment. Further, those staff engaged in the job development process should be well informed about the personal needs, aspirations, and abilities of individuals. In our view, the tasks of assessing, counseling, and placing clients in jobs are very closely linked and are best accomplished by one individual or a closely knit team of professionals. Only when they can meet the needs of both clients and employers will human resource organizations be capable of effectively performing their roles as labor market intermediaries.

2. *Marketing and sales staff must have knowledge of the potential market for the goods and services being produced by the firm.* While it is essential that marketing and sales staff have information about the product they are selling, it is of equal importance that they have knowledge of their potential market. Perhaps most obvious is the need to know who the potential customers are for their goods and services. Unlike private sector sellers who carefully target their

customers, all too often human resource programs fund specific types of occupational programs with little thought given to identifying specific firms within a local labor market likely to hire such workers. Often such funding decisions are based upon projections of future employment requirements or some other type of information, often highly generalized or speculative. Effective marketing should begin by identifying those "market segments" that are most likely to hire graduates of training programs. In Massachusetts, there are approximately 135,000 business establishments engaged in a wide array of economic activities. These establishments possess enormously diverse occupational, educational, and related personnel requirements. The first efforts of the marketing job development staff should be to identify those particular sets of firms or "market segments" where graduates of programs are most likely to be employed. Thus, they need to obtain information sources that accurately depict the occupational staffing patterns of industries within Massachusetts. Such information can help them begin the process of identifying potential customers for the graduates of their programs.

After identifying "target" market segments, the next task is to identify the characteristics and names of firms that comprise these target markets. Specifically, job developers and placement staff need information about the names, addresses, and telephone numbers of individual firms within each of the market segments. This information will provide the basis for initial marketing efforts by identifying those local employers who are *most likely* to hire graduates of programs. While this listing of target market employers provides staff members with useful information on the potential market for their clients, they also need to verify the

potential effective demand for the clients of the programs. Private sector firms often go to considerable trouble to determine the tastes and preferences of consumers for various types of goods and services that they produce. Human resource agencies need to engage in similar types of market research activities. Information on recent and projected growth in employment for key market segments can provide useful inputs into the process of determining potential demand for the graduates of human resource programs. Knowledge of the current hiring activities of local employers and the types of workers they are hiring, including information on hiring requirements such as education, training, and background experience, can help human resource programs to effectively gauge the demand for their clients by firms within key industries.

3. *Based upon the above knowledge of clients and employers, marketing staff must develop a coherent market strategy.* A marketing strategy is simply a plan that assists sales staff in determining what activities will be undertaken to market goods and services and explains why a particular approach to marketing efforts has been undertaken. Good marketing strategy is based on solid market information *and* is closely linked to the fundamental mission of the organization. An effective marketing strategy will identify key market segments where a business organization's sales activities are most likely to meet existing goals and objectives. The marketing strategy should be shaped by the organization's mission and informed by knowledge of local market conditions.

Similarly, the development of a marketing strategy for a human resource organization must be based upon intimate knowledge of the mission of the program and combined with detailed knowledge of local

labor market conditions and areas of placement opportunity. In support of this planning process, the Massachusetts Department of Employment and Training provides a number of information products useful in assessing labor market conditions and identifying sectors of potential marketing opportunities. *The Job Guide* is designed as a key information input into this strategic planning process. Effective use of the Guide will help human resource organizations determine which market segments are most likely to hire the graduates of the human resource system. This knowledge of local labor markets coupled with a clear view of the organization's mission will provide the foundation for effective human resource marketing activities.

Once staff have identified the specific marketing activities to be undertaken, no marketing strategy would be complete without an ability to evaluate ongoing marketing efforts. Too often organizations fail to undertake ongoing evaluations of their operations and thus fail to adjust for changes in market conditions or for errors that were made in the planning process. A monitoring system that effectively tracks the ongoing operation and effectiveness of marketing efforts is an essential ingredient in the development of an effective marketing system.

4. *Effective marketing programs must develop a specific tactical approach for use in obtaining sales.* The marketing staff of human resource organizations must be well equipped to handle the difficult tasks of selling. This is particularly true when the "product" is a potential employee to local employers. Human resource agency placement staff must be effectively trained in systematic procedures for convincing employers that their organization is an effective and

accountable source of labor supply. At the heart of this sales approach must be the view that the organization desires a long-term service relationship with firms based upon its ability to deliver the right personnel at the right time. Placement staff must be well versed in methods of opening access to employers, establishing a dialogue with employers, explaining the benefits of developing an ongoing relationship with their organization, meeting potential objections of employers to such a relationship, and closing the sale or reaching an agreement with employers to work with the organization.

The preceding discussions have provided an overview of the hallmarks of effective sales organizations. The following section will provide a discussion of the way human resource organizations can begin to develop a business approach to marketing clients of human resource programs based on these marketing principles.

Implementing a Marketing Approach to Job Development and Placement

Among the key elements of an effective marketing operation is knowledge of your products and an understanding of your potential markets. Over the past several years, working with a wide array of employment, training, and educational organizations, the Center for Labor Market Studies has developed what we believe to be a highly effective marketing approach to job development and placement for government and nonprofit human resource agencies. Private for-profit organizations rely on a system of market prices, advertising techniques, and profits to guide them in organizing their production processes and in influencing their market behavior. Yet for most human resource organizations, no such price or profit system exists to help guide their ongoing operations. *The Job Guide* system has been designed to provide human resource programs with "market savvy" in the absence of a price-signaling or profit system by modeling their behavior along the lines adhered to by successful private sector firms.

Our business approach to job development and placement has six basic components that are designed to help human resource organizations better know their clients and their potential markets. These components include:

- o Client Assessment
- o GOE/Matrix Analysis
- o The Industry/Establishment Name and Address Listing
- o The Firm Profiles
- o An Internal Accountability System

o Education, Training, and Service Provider Inventories

The fundamental feature of this approach is that of organizing a diverse set of information sources to move human resource program clients into desired, available employment opportunities and, when needed, refer them to other appropriate employment and training services, social services, and educational programs. Obviously, our computerized *Job Guide* composes only a part of this system. However, by drawing upon existing materials, human resource agencies should be able to begin instituting a job development and placement process built upon our business approach. By carefully and systematically developing staff capabilities and compiling useful assessment and marketing materials over time, local human resource agencies should be able to more effectively meet the needs of both program clients and local employers.

Client Assessment

We have already discussed the need for intimate knowledge of clients' aptitudes, abilities, and interests when attempting to market them to prospective employers. This means that the first elements of an effective employment and training system must be devoted to properly determining clients' abilities, interests, values, aptitudes as seen in the context of their personal and familial situations. Effective employment and training programs must have the ability to assess their clients on a variety of dimensions, including basic skills and literacy proficiencies, occupational skills, occupational interests, and personal and family barriers to successful labor market participation. Currently, a

diverse array of assessment tools is available to the human resource delivery system. Yet, in many cases, little formal or systematic client assessment is actually undertaken.

One of the reasons why little assessment is now undertaken is limited accessibility of staff to various types of testing services. A recent study of testing activities in local Employment Service offices revealed that three major factors inhibit the delivery of assessment services to clients. First, the heavy emphasis that the Employment Service places on simple measures of placement acts as a disincentive for staff to devote resources to activities that do not lead to immediate job referral. As local management and staff are increasingly evaluated on gross placement performance, increased resources are devoted to "meeting the numbers" with the most employable clients rather than serving those in greater need of a more comprehensive set of services. Second, as the human resource development services of the Employment Service have been deemphasized, staff expertise in the area of client assessment has atrophied. Third, the long time lags that can occur between registration of a client, scheduling of tests, and followup interviews to discuss test results discourage client participation in the assessment process. Clearly, a need exists to overcome these problems so that human resource agencies may indeed "know their product." Toward this end, human resource program managers need to improve their performance measurement systems in order to acknowledge the contributions of staff who engage in effective assessment, counseling, and service referral activities. Once this is accomplished, enhanced staff training and computerization of testing activities should go a long

way toward overcoming the latter two barriers to effective assessment.

After clients go through an assessment process, the next step is to determine the immediate and longer-term occupational implications of the results of that assessment. This process, as discussed in more detail below, is designed to establish career goals and employment objectives for the client. It is at this point that the characteristics of clients are compared with the requirements of firms in the local economy.

GOE/Matrix Analysis

The development of a fairly specific occupational goal is an essential element of any system designed to link client characteristics to local labor market requirements. In response to this need, the U.S. Department of Labor developed a publication titled *A Guide to Occupational Exploration* (GOE) that was designed to relate specific client traits and interests with various occupations in the American economy. Thomas Harrington and Arthur O'Shea, with the support of the American Guidance Association, reissued a revised and expanded GOE. This second edition of the GOE is designed to identify career fields that are consistent with the interests, aptitudes, and values of clients that are revealed through the assessment process. Using the U.S. Department of Labor's *Dictionary of Occupational Titles* (DOT) as its source of job titles, the GOE reorganizes DOT jobs, clustering them into 66 interest and aptitude-based work groups. Within each of these work groups are lists of job titles and accompanying DOT codes. The GOE provides some additional information about the education and training requirements of each job listed. Thus by using the second

edition GOE, staff are able to convert the findings of the assessment process into a specific set of occupational goals for clients. This is the normal ending point in the traditional approach to career counseling. But in our business approach to job development, this is simply the completion of another step along the path to a successful placement.

The next task after completing the individual assessment and GOE analysis is to examine the potential for a client's finding a job in the local economy within a particular occupational field. In other words, job developers and clients need to judge the feasibility of occupational choices within the context of the current realities of the state and local labor market. In order to accomplish this task, human resource job placement and development staff need information about the occupational structure of the local economy. The industry/occupation matrix disk, a critical element of the computerized *Job Guide*, provides information on the job content of the Massachusetts economy, dividing it into its industrial and occupational components. The occupational information contained on this disk is derived from a very large-scale employer-based survey called the *Occupational Employment Statistics* (OES) survey operated by the Massachusetts Department of Employment and Training. The OES survey collects information from employers on industry staffing patterns for a wide array of two-digit and three-digit Standard Industrial Classification (SIC) industries in the state. Using a structured questionnaire tailored to the job traits of individual industries, the OES survey obtains information on the number of workers employed in a large number of occupations (150 to 200 per industry) within a particular industry.

The OES survey data are then organized into a matrix that is designed to shed insight into two key sets of questions. First, what are the occupational staffing patterns of industries within the state? Second, how are occupations distributed across industries in the state? The industry-occupation option included on the disk provides the user with information on the staffing patterns of more than 200 industries within the state. For example, suppose the hospital industry (SIC 806) is growing rapidly. The industry-occupation option on the matrix disk will provide the following information on hospital staffing patterns:

SIC 806 Hospitals

Occupation	Number of Employees	Share of Industry Employment
Professional Nurses	33,025	22.5
Nurse Aides	12,480	8.5
Licensed Practical Nurses	10,407	7.1
Cleaning, Service Workers	7,445	5.1
Secretaries	5,820	4.0
Physicians & Surgeons	5,772	3.9
Managers	5,611	3.8
Psychiatric Aides	3,673	2.5
Food Service Workers	3,417	2.3
Kitchen Helpers	3,142	2.1

The above table depicts the ten largest occupations within the hospital industry, headed by professional nurses with over 33,000 workers.

Information on employment in more than 150 occupations in the hospital industry is available from the state OES matrix. These data are useful in determining the likely occupational impacts of short-term job growth. Further, these data depict in fairly substantial detail the types of jobs available to individuals interested in a career in the health field. While this industry/occupation display can be useful, more frequently counseling and placement professionals will require matrix data from an occupational perspective, using the occupation-industry option provided in the matrix disk. The occupation-industry option provides information about those industries most likely to hire workers in a particular occupational area. For example, suppose our assessment and GOE analysis reveals that our client is well suited for the computer service technician occupation. The next question to ask is what specific industries are likely to hire computer service technicians? The occupation-industry matrix provides a rank ordering of those industries that employ computer service technicians, as illustrated below:

Computer Service Technicians

SIC Code	Industry	Percent of Employment in this Occupation
508	Machinery Equipment & Supply Wholesale	77%
737	Computer and Data Processing Services	10%
357	Office and Computing Machinery Manufacturing	10%

The above data reveal that employment of computer service technicians is very concentrated in just three industries. A check of recent industry employment trends based on employment data derived from the Current Employment Survey and the ES-202 program can be used to gauge the recent hiring activities of these specific industries. Effective job development efforts would clearly be targeted at SIC 508, Machinery Equipment and Supply Wholesaling, where over three-quarters of all these technicians are employed. Thus, SIC 508 becomes a "target" industry for developing jobs for our client. Our next step, discussed in detail below, is that of gaining access to a systematically organized listing of local business establishments appearing in the industry classified as SIC 508.

The Industry/Establishment Name and Address Listing

The second major element of the automated *Job Guide* is the establishment name and address listings. Once a job developer or placement professional has identified a local targeted industry, he or she needs information on the names, addresses, and phone numbers of the firms comprising this industry in the local economy. The name and address option of the automated *Job Guide* contains listings of over 70,000 firms in Massachusetts organized by Service Delivery Area (SDA) and by three-digit SIC. Thus, for example, if the client lives and wishes to work in the Burlington area, the job placement staff need only select the Metro North SDA listing and then simply key in SIC 508 at the computer prompt. The job developer will then be provided with a listing of the names, addresses, and

phone numbers of machinery wholesaling firms in the Metro North area. This listing thus targets placement efforts for the would-be computer service technician upon those firms within the Metro North area most likely to hire computer service technicians. With these procedures, we have effectively begun the process of matching the characteristics and aspirations of our clients to the employment needs of the local economy.

The Firm Profiles

The name and address listing simply points out those firms within an SDA who are most likely to hire clients of specific human resource programs. Yet such information needs to be supplemented with additional information on the actual hiring activities, recruitment efforts, and education/training requirements of these local firms. A major portion of the time of job development and placement staff is spent on meeting with local employers in order to obtain job orders. During the course of these visits, a substantial amount of information on firms' hiring policies and recent hiring activities can be acquired. Placement staff often have considerable knowledge of the hiring polices and activities of selected firms at the local level. Unfortunately, this information is seldom systematically organized, nor is it available to other employment and training organizations at the local level. One consequence of this has been the proliferation of local employer surveys conducted by Private Industry Councils, local education agencies, and other human resource programs. Human resource organizations should seek to systematically organize information on the labor market activities of local employers that is generated as part of their continuing contacts with local

employers. This firm-profiling system should be designed to track the education and training requirements and hiring activities of key target firms. As we gain more insight into the personnel policies and practices of local firms and systematically organize this information so that it becomes readily retrievable, this information base can become the basis for the development of long-term service relationships with these firms based upon solid knowledge of their human resource requirements.

An Internal Accountability System

A key element of our business approach to job development and placement is that of monitoring and evaluating the implementation of our marketing strategy. Such an effort can help in identifying the strengths and weaknesses of existing marketing efforts and guide agency staff in revising and improving marketing plans. Too often, managers of human resource programs know too little about the job development efforts of staff or the types of outcomes staff generate as a result of visiting local employers. Rather, management typically tends to rely on relatively crude aggregate measures of placement rates or employment rates. One consequence of this limited monitoring of job placement activities is the development of the "finger-pointing syndrome" that frequently develops among various units within a human resource agency or, at times, between agencies within the system. This syndrome refers to the recriminations that often ensue when programs fail to meet their overall job placement or employment goals. The syndrome usually manifests itself in the following manner. First, as management observes poor

placement rates, they immediately contact the placement unit to find out the underlying reasons for poor placement performance. Often, the placement staff will respond with "...the market is soft," or "the product is not meeting employer needs." These answers are then usually supported by an anecdote or "horror story" illustrating the point. Thus, instead of understanding why the placement strategy is failing, program staff simply attempt to lay blame elsewhere.

A well-designed marketing and job development system should be capable of providing useful information on the underlying nature of the success or failure of existing placement efforts. The basis for development of this capacity should be the target market firms that were identified as part of the initial marketing campaign. Since the listing of target market firms includes those firms with the greatest likelihood of hiring clients, human resource program managers need to devise a system that generates information on the *particular types of outcomes* that occur at each marketing visit. Continuing our previous example of the computer service technician, the case below illustrates the types of information that should be routinely compiled within the accountability system.

Target Occupation: Computer Service Technician

Target Industry: SIC 508, Machinery Equipment and Supply Wholesale

Service Delivery Area: Metro North

(A)	(B)	(C)
Establishment	Name, Title and Phone Number of Person Responsible for Hiring	Number of Computer Service Technician Jobs
Jones Import-Export 420 Northwest Highway Burlington, MA	Bob Jones, President 555-1234	4

(D)	(E)	(F)
Recent Employment Trends	Comments	Outcome
Moderate growth in employment expected during next few months	Firm hires a few computer service technicians, but usually has openings only for persons with substantial sales experience.	No referrals as of now; will call back to discuss possibility of an OJT for a new graduate.

(A)	(B)	(C)
Establishment	Name, Title and Phone Number of Person Responsible for Hiring	Number of Computer Service Technician Jobs
Computer Service Corporation 442 Hartford St. Woburn, MA	Karen Dickson Director of Operations 555-8190	7

(D)	(E)	(F)
Recent Employment Trends	Comments	Outcome
Sharp growth in past year; difficulty in recruiting qualified applicants	Expressed interest in interviewing several of our graduates.	Made two referrals; no hires since our graduates lack knowledge of network hardware.

(A)	(B)	(C)
Establishment	Name, Title and Phone Number of Person Responsible for Hiring	Number of Computer Service Technician Jobs
MOE'S House of Computer Supply 442 Colony Rd. Burlington, MA	Larry Smith Personnel Director	14

(D)	(E)	(F)
Recent Employment Trends	Comments	Outcome
Recent strong growth; considering opening a new warehouse in Bedford.	Trains new staff on the job with close supervision and in-house training program.	Made 4 referrals; two hires; employer seems to prefer referrals with outgoing personalities. Helps in customer relations.

The type of information presented above provides the job developers with insight into firms in the local labor area that employ computer service technicians and highlights the differences in their human resource requirements. For example, Jones

Import-Export does not hire workers without prior experience in the target occupation. Thus, job development staff made no referrals to the company. However, they did note that the firm is expanding and may be responsive to an OJT arrangement. Staff have scheduled a followup contact with the firm. Computer Service Corporation does hire computer service technicians, and staff made two referrals. However, neither of those individuals were hired since they lacked training in the repair of computer network hardware, a speciality area of the firm. All clients referred to this firm in the future should possess this skill. MOE's House of Computer Supply hired two of the four individuals that were referred. The hiring decision was in part based on the personalities of the individuals referred. The types of information included in the accountability system can help managers and job developers improve their understanding of how and why clients do or do not meet the needs of local employers.

Education, Training, and Service Provider Inventories

Clients seeking services through state and local human resource systems are not always immediately qualified to take a job. A major task of the client assessment system is to sort out job-ready clients from those who confront some type of skill, literacy, child care, or other barrier to employment. An effective assessment system will not only sort out the non-job-ready, but also provide insight into the types of education, training, and support services needed by clients in order to achieve their employment goals. While those clients who are deemed job-ready can utilize the job development and placement process

described in the previous pages, non-job-ready clients must also gain access to the appropriate set of services.

Currently, little systematically organized information exists that could provide a clear and concise depiction of the types of human resource and support services that are available to the client population within an SDA. Yet such information is of central importance if we are to provide clients with the appropriate sets of remedial and training services in an environment of scarce financial resources. The ability of the Job Training Partnership Act (JTPA) program, State Employment Security Agencies (SESA), and other employment and training programs to make appropriate referrals is substantially inhibited by a lack of well organized resource information.

Each human resource agency within the state needs access to a comprehensive directory of human resource and social service providers that operate within the SDA. This directory should provide information on the names and addresses of these organizations along with a description of the services they offer, eligibility requirements for such services, costs, and the timing of such services. With such information, assessment staff should be more capable of easily contacting other service providers to determine whether a referral to that particular agency is appropriate to enable clients to gain access to requisite services.

Summary and Conclusion

Job development and placement activities of human resource programs will continue to play an indispensable role in determining their overall effectiveness. *The Job Guide* for the state of Massachusetts is designed to enhance the ability of job

development and placement staff to design and implement effective marketing and job placement strategies. The industry/occupation employment data and the establishment listings that form the core of *The Job Guide* system are critical elements of the marketing and job development process. These formal information sources would ideally be complemented with a systematic set of local employer profiles and an accountability system for documenting and appraising ongoing job development and placement efforts. When properly used and supplemented by informal information sources on local employer hiring policies and practices, this *Guide* should be able to contribute in a substantive manner to the long-run effectiveness of local employment and training programs.

Using the Automated Job Guide

The automated *Job Guide* is organized into three basic components: system programs, matrix data, and firms' name and address listings. The first component is contained on the SYSTEM DISK. This disk contains the set of computer programs that controls the use of the matrix data and the name and address listings. The MATRIX DISK contains information on the job content of the state economy. This information can be accessed in two ways: first, from the industry perspective that details industry staffing patterns (the industry-occupation option on your screen); and second, from the occupational perspective that reveals which industries employ workers in any particular occupation (the occupation-industry option on your screen). The third component of the system is the industry name and address listing (the address listing option on your screen). This is contained on the ADDRESS DISK.

The basic framework for organizing *The Job Guide* is the Standard Industrial Classification (SIC) system. Virtually all of the available sources of labor market information useful in tracking employment developments are based on the SIC system. Thus, we have provided below a brief review of the organization of the SIC system to familiarize the reader with its uses and limitations from the job development and placement perspective.

Classifying Jobs in the Massachusetts Economy

A key task in the business approach to job development and placement is that of identifying key market segments or "target markets" where we believe

our job development and placement efforts will be most effective. The SIC system is a convenient tool for defining such market segments and then assessing employment prospects in each segment. This is not a trivial task, since there are approximately 135,000 business establishments in the state employing about three million workers.

The SIC system groups business firms (or, in more technically accurate terms, economic establishments) according to the type of production service each firm produces. Individual firms are clustered into product groupings, or "industries." The SIC is organized as a hierarchy that defines product groups at three levels of specificity. The broadest groups into which all economic establishments can be classified include these ten:

- o Agriculture, Forestry, and Fishing
- o Mining
- o Construction
- o Manufacturing
- o Transportation, Communication, and Utilities
- o Wholesale Trade
- o Retail Trade
- o Finance, Insurance, and Real Estate
- o Services
- o Public Administration

For example, both a men's clothing producer and a jet engine manufacturer would be classified in the manufacturing sector since they both manufacture products, although quite different ones. Fortunately, the SIC system subdivides each of the ten major industries into approximately 90 "two-digit" SIC industries. These two-digit SIC industries allow us to further classify business firms into more specific product

groupings. We can classify the manufacturer of men's clothing as belonging to the apparel industry (SIC 23) while the jet engine manufacturer is classified into the machinery manufacturing industry (SIC 35).

Finally, even more refined three-digit SIC industry classifications exist. For example, the machinery industry (SIC 35) is made up of nine individual three-digit SIC industries. Thus, producers of jet engines (SIC 351) can be readily differentiated from manufacturers of such diverse goods as construction equipment (SIC 353) or computers and office equipment (SIC 357). We need to organize *The Job Guide* by these detailed three-digit SIC industries for three reasons. First, not all industries within an economy perform equally well. Parts of the Massachusetts economy can expand rapidly while other parts decline. The economic forces causing decline in the apparel manufacturing industry are quite different from those causing the current expansion in retail trade in the state. The SIC system allows us to track the performance of various segments of the state economy and, more importantly, to assess job prospects among various industries in the state. A second reason for using the SIC is that occupation and skill requirements involved in producing various types of products vary widely. For example, apparel manufacturing firms are dominated by a somewhat low-skilled set of occupations, employing workers who have relatively low levels of educational attainment. In contrast, the health and hospital industry is dominated by higher level occupations that require workers with high levels of educational attainment. By organizing our matrix data around the SIC system, we can gain insight into the diverse needs of individual industries in Massachusetts.

Finally, by using the SIC system, we can relate the findings of our occupational analysis using the MATRIX DISK to specific firms within our local labor market area that comprise a market segment included on the name and address disk.

Running the Job Guide System

	Dual Floppy	**Hard Drive**
Color	**Combination A**	**Combination C**
Monochrome	**Combination B**	**Combination D**

The automated *Job Guide* is designed to run on most personal computer systems that are PC, XT, or AT compatible. *The Job Guide* must run on a machine with at least two disk drives. One of the drives must be a 360K 5 1/4 inch floppy disk drive. *The Job Guide* can be used on either a monochrome or color system. You must specify the type of machine you use and the Massachusetts Department of Employment and Training will supply you with the appropriate type of system disk. Using the table above, you can let the Department of Employment and Training know which type of system disk you need.

If you have a floppy disk system, *The Job Guide* doesn't need to be installed. If you have a hard disk system, put the SYSTEM DISK into your floppy drive and type the word "install" at the A> prompt. Then follow the instructions on the screen.

For both floppy and hard disk systems, it is a good idea to make backup copies of *The Job Guide*.

Starting Up

Boot your system using your own MS-DOS as you normally would when turning on your machine. For a floppy disk system, once the system is booted insert the SYSTEM DISK into the A: drive and type "Jobguide" at the A> prompt. For a hard disk system, just type "Jobguide" at the C> prompt. This will begin operating *The Job Guide* system.

Three options will appear on the screen:

Industry-Occupation Matrix

Occupation-Industry Matrix

Address Listing

Initially the Industry-Occupation matrix will be highlighted on the screen. If you wish to run the industry-occupation matrix, you would simply hit enter. If you would like to use one of the other options on the system, simply use the up or down cursor (arrow) keys to change your option.

The Industry-Occupation Matrix

If you decide to pick the industry-occupation matrix, simply push enter after this option is highlighted. The screen will then display a listing of the ten major industry groups in the state. Using the cursor key, then pick the industry you wish to examine and hit the enter key. The screen will then list an array of two-digit and three-digit SIC's from which to choose. Two-digit SIC's are displayed in upper-case letters, three-digit SIC's in lower case. If you select a three-digit SIC, then the staffing pattern for that industry will be displayed. If you select a three-digit SIC, then the three-digit industries that make up the two-digit industry are displayed. Selecting one of these three-digit industries will then display that particular

industry's staffing pattern. In order to return to the major option screen, simply strike the esc key until you have backed up to the starting point.

The Occupation-Industry Matrix

If you wish to use the occupation-industry matrix, simply pick that choice on the major option screen and hit "enter." This will call up a screen that displays 15 major occupational groupings. Again, use the cursor keys to select the occupational group of interest. This will produce a screen that presents a second, more detailed, set of occupational groupings. Depending on the occupational grouping you choose, one or two more option screens may appear. Any occupational title that appears in upper case will lead to a new option screen of more detailed occupations. Lower-case titles will lead to the matrix information. After you have selected a lower-case occupation, the screen will display the following instructions:

Insert the Matrix Disk in B: drive

Press: Enter when done, escape from menu.

By simply following the instructions, the matrix information you desire will appear on the screen. Again, use the esc key when you wish to back-up to the main option screen.

Name and Address Listing

To use the name and address listing option simply select that option and hit "enter." A listing of the JTPA Service Delivery Area (SDA) in the state will appear. Select the SDA you desire and hit "enter." The system will then ask, "what SIC do you want addresses for?" Respond by typing in the three-digit SIC in which you are interested. When typing the three-digit SIC, use

the numbers that appear on the keys at the top of your key board. You can only type one three-digit at a time. The machine will then ask you to insert the appropriate SDA address listing floppy disk in the B: drive and press "enter." The names and addresses of the industry you selected within the SDA will appear. To access additional industries, simply back up to the SDA listing to begin again. Normally you will receive only floppy disks with address listings relevant to your own SDA. If you desire other listings, contact the Massachusetts Department of Employment and Training.